

INTEGRATED MICROMACHINED FILTER SYSTEMS AND METHODS

Abstract of the Disclosure

A micromachined filter system comprises a micromachined filter integrated in a micro-device. In various embodiments, the micromachined filter system is fabricated along with the micro-device using the same or similar techniques. The micromachined filter may comprise a polysilicon filter. According to the micromachined filter system, the micromachined filter may be formed in one or more polysilicon layers of the micro-device. The micromachined filter may also comprise a polyimide filter. In various embodiments, the micromachined filter may be situated downstream of a fluid inlet of the micro-device. In various embodiments, a non-integrated, external pre-filter may be used in conjunction with an integrated micromachined filter.

Figures